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EXAMINER	
JARRETT, SCOTT L	

ART UNIT	PAPER NUMBER
3623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/065,410	CAVARETTA, MICHAEL	
	Examiner	Art Unit	
	Scott L. Jarrett	3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 October 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/21/02*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Non-Final Office Action is responsive to Applicant's submission filed October 16, 2002. Currently Claims 1-18 are pending.

Claim Objections

2. Claim 11 is objected to because of the following informalities: claim 11 appears to be incomplete wherein claim 11 recites "wherein machine learning is implemented to the input data" instead of the intended "wherein machine learning is implemented ~~to~~ for processing the input data." Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-9 and 12-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims, as currently recited, appear to be directed to a compilation of data without any tangible result and are therefore deemed to be non-statutory while the compilation of data may have some real world value (i.e. utility/usefulness) there is no requisite functionality present to satisfy the practical application requirement nor are there any "acts" which transform the data and/or cause a physical transformation to occur outside the computer (i.e. not concrete or tangible) therefore the invention as claimed does not produce a useful, concrete, *and* tangible result.

Merely claiming nonfunctional descriptive material, **i.e.**, abstract ideas, stored in a computer-readable medium, in a computer, on an electromagnetic carrier signal does not make it statutory. See Diamond v. Diehr, 450 U.S. 175, 185-86, 209 USPQ 1, 7-8 (1981) (noting that the claims for an algorithm in Benson were unpatentable as abstract ideas because "[t]he sole practical application of the algorithm was in connection with the programming of a general purpose computer."). Such a result would exalt form over substance. In re Sarkar, 588 F.2d 1330, 1333, 200 USPQ 132, 137 (CCPA 1978) ("[E]ach invention must be evaluated as claimed; yet semantogenic considerations preclude a determination based solely on words appearing in the claims. In the final

analysis under 101, the claimed invention, as a whole, must be evaluated for what it is.") (Abele, 684 F.2d 902, 907, 214 USPQ 682, 687(CCPA 1982)). See also In re Johnson, 589 F.2d 1070, 1077, 200 USPQ 199, 206 (CCPA 1978) ("form of the claim is often an exercise in drafting"). Thus, nonstatutory music is not a computer component and it does not become statutory by merely recording it on a compact disk. Protection for this type of work is provided under copyright law.

A claimed invention is deemed to be statutory, if the claimed invention produces a useful, concrete, and tangible result. An invention, which is eligible for patenting under 35 U.S.C. 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The fundamental test for patent eligibility is thus to determine whether the claimed invention produces a "use, concrete and tangible result". See AT&T v. Excel Communications Inc., 172 F.3d at 1358, 50 USPQ2dat 1452 and State Street Bank & Trust Co. v. Signature Financial Group, Inc., 149 F.3d at 1373, 47 USPQ2d at 1601 (Fed. Cir. 1998).

The test for practical application as applied by the examiner involves the determination of the following factors"

(a) "Useful" - The Supreme Court in Diamond v. Diehr requires that the examiner look at the claimed invention as a whole and compare any asserted utility with the claimed invention to determine whether the asserted utility is accomplished. Applying utility case law the examiner will note that:

i. the utility need not be expressly recited in the claims, rather it may be inferred.

ii. if the utility is not asserted in the written description, then it must be well established.

(b) "Tangible"-Applying In re Warmerdam, 33 F.3d 1354, 31 USPQ2d 1754 (Fed. Cir. 1994), the examiner will determine whether there is simply a mathematical construct claimed, such as a disembodied data structure and method of making it. If so, the claim involves no more than a manipulation of an abstract idea and therefore, is nonstatutory under 35 U.S.C. 101. In Warmerdam the abstract idea of a data structure became capable of producing a useful result when it was fixed in a tangible medium, which enabled its functionality to be realized.

(c) "Concrete" - Another consideration is whether the invention produces a "concrete" result. Usually, this question arises when a result cannot be assured. An appropriate rejection under 35 U.S.C. 101 should be accompanied by a lack of enablement rejection, because the invention cannot operate as intended without undue experimentation.

In the present case, claims 1-9 and 12-18 merely recite a method for construction a motor vehicle satisfaction prediction model, a collection of data (i.e., concrete and/or useful). While the invention may be concrete and/or useful, there does not appear to be any tangible result.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1-8 and 10-17 are rejected under 35 U.S.C. 103(a) as being obvious over Lang, U.S. Patent No. 6,807,518 in view of Gistafsson et al., Measuring and managing the satisfaction-loyalty-performance links at Volvo (2002).

The applied reference, Lang, U.S. Patent No. 6,807,518, has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C.

103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Regarding Claims 1 and 12 Lang teaches a system and method for collecting, aggregating and analyzing a motor vehicle buyer data comprising:

- presenting a buyer satisfaction survey to at least a portion of a buyer base for one or more motor vehicles (Column 3, Lines 35-38; Column 4, Lines 20-30);

- for each buyer that completes the survey joining the buyer's survey response with the buyers transactional and warranty claim data to create an aggregate of buyer data, including satisfaction data, for a portion of the buyer based that completed the survey (data cube, database; Column 3; Column 4, Lines 19-59; Column 5, Lines 15-27; Figures 1-2); and

- analyzing and constructing models for at least one motor vehicle buyer based on the aggregate buyer data (data analysis, OLAP; Column 4, Lines 60-68; Column 5, Lines 28-44).

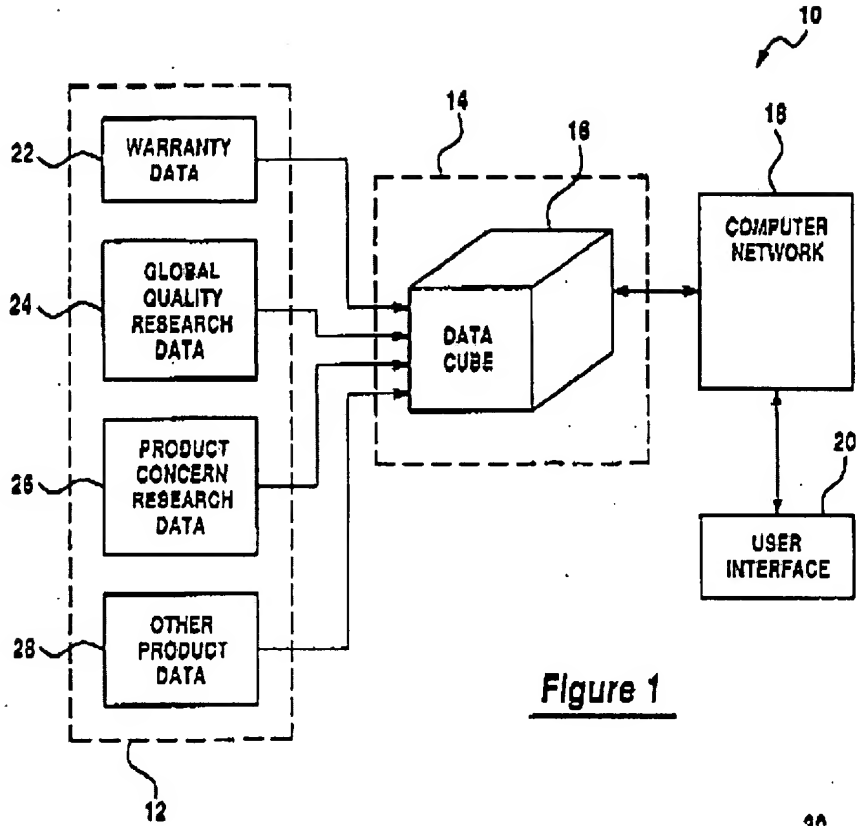

Figure 1

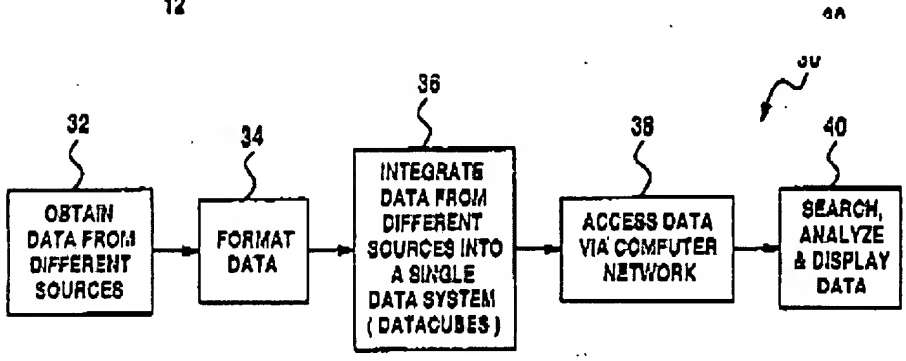

Figure 2

While Lang teaches performing conventional/traditional data analysis on the aggregate motor vehicle buyer data (Column 1, Lines 29-45) Lang does not expressly teach constructing a satisfaction prediction model for at least one motor vehicle buyer

that has not completed the survey based on the aggregate buyer satisfaction data as claimed.

Gustafsson et al. teach constructing a satisfaction prediction model for at least one motor vehicle buyer that has not completed the survey based on aggregate buyer satisfaction data (Column 2, Last Bullet, Page 252, Column 2, Page 253; Column 2, Paragraph 2, Page 255; Column 2, Paragraph 1, Page 256; Column 2, Paragraph 3, Page 257; Figures 1-4, Table 1) in an analogous art of collecting and analyzing motor vehicle customer satisfaction data for the purposes of understanding the links/drivers between customer satisfaction, loyalty and business performance (Abstract; Column 1, Paragraph 1, Page 258; Figures 1-2).

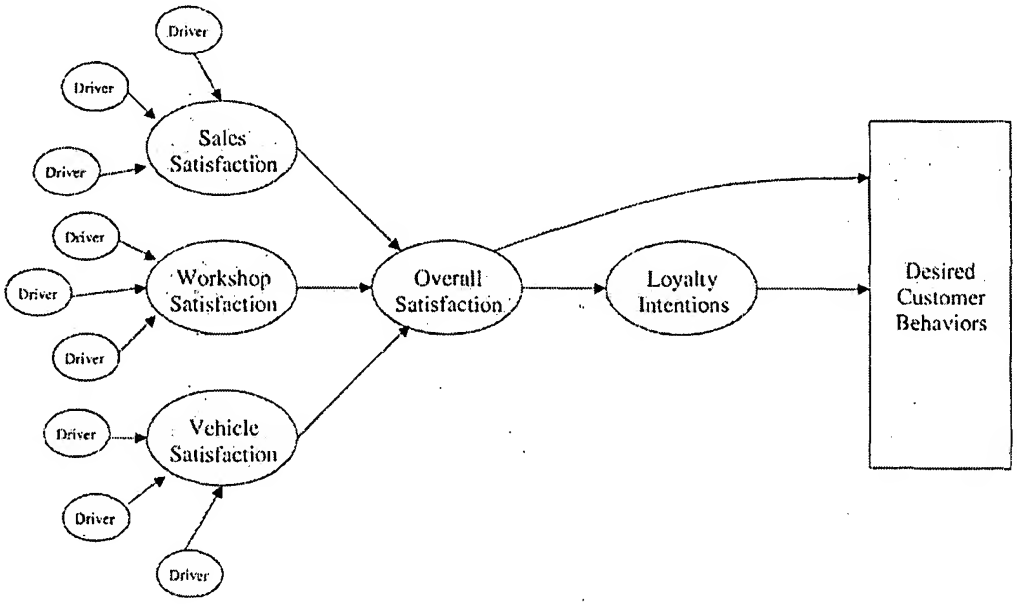

Figure 2 Volvo's framework for integrating quality, satisfaction, loyalty, and profits

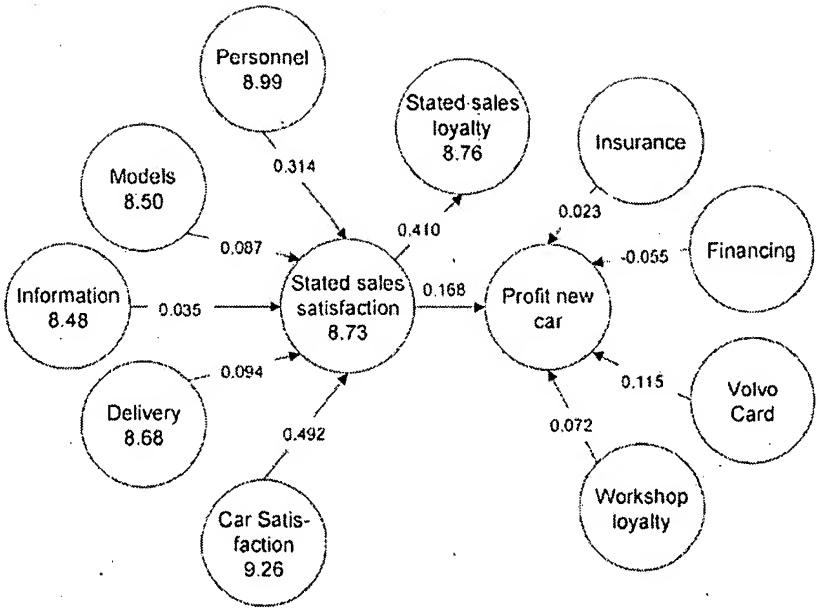

Figure 4 Sales satisfaction model for Volvo dealers

It would have been obvious to one skilled in the art above that the system and method for collecting and analyzing motor vehicle customer satisfaction data as taught by Lang would have benefited from generating a predictive model based on the plurality of motor vehicle data collected in view of the teachings of Gustafsson et al.; the resultant system/method enabling businesses to understand the links/drivers between customer satisfaction, loyalty and business performance (Gustafsson et al.: Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

Regarding Claim 2 Lang teaches a system and method for collecting and analyzing aggregate motor vehicle buyer data as discussed above.

Lang does not expressly teach predicting buyer satisfaction for a motor vehicle buyer as claimed.

Gustafsson et al. predicting buyer satisfaction for a motor vehicle buyer (Column 2, Last Bullet, Page 252, Column 2, Page 253; Column 2, Paragraph 2, Page 255; Column 2, Paragraph 1, Page 256; Column 2, Paragraph 3, Page 257; Figures 1-4, Table 1) in an analogous art of collecting and analyzing motor vehicle customer satisfaction data for the purposes of understanding the links/drivers between customer satisfaction, loyalty and business performance (Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

It would have been obvious to one skilled in the art above that the system and method for collecting and analyzing motor vehicle customer satisfaction data as taught by Lang would have benefited from predicting buyer satisfaction for a motor vehicle buyer in view of the teachings of Gustafsson et al.; the resultant system/method enabling businesses to understand the links/drivers between customer satisfaction, loyalty and business performance (Gustafsson et al.: Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

Regarding Claim 3 Lang teaches a system and method for collecting and analyzing aggregate motor vehicle buyer data as discussed above

Lang does not expressly teach predicting consumer behavior for a potential motor vehicle buyer as claimed.

Gustafsson et al. predicting consumer behavior for a potential motor vehicle buyer (Column 2, Last Bullet, Page 252, Column 2, Page 253; Column 2, Paragraph 2, Page 255; Column 2, Paragraph 1, Page 256; Column 2, Paragraph 3, Page 257; Figures 1-4, Table 1) in an analogous art of collecting and analyzing motor vehicle customer satisfaction data for the purposes of understanding the links/drivers between customer satisfaction, loyalty and business performance (Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

It would have been obvious to one skilled in the art above that the system and method for collecting and analyzing motor vehicle customer satisfaction data as taught by Lang would have benefited from predicting consumer behavior for a potential motor vehicle buyer in view of the teachings of Gustafsson et al.; the resultant system/method enabling businesses to understand the links/drivers between customer satisfaction, loyalty and business performance (Gustafsson et al.: Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

Regarding Claims 4-8, 11 and 14-17 Lang teaches the utilization of a plurality of mathematical, statistical and/or computational approaches/methods/techniques to

construct the predictive model including machine learning, decision tree, neural network, recursive modeling and/or logistic regression.

Gustafsson et al. teach a plurality of mathematical and statistical methods/techniques for analyzing the customer satisfaction data.

Neither Lang nor Gustafsson et al. expressly teach all of the mathematical, statistical and/or computational approaches/methods/techniques recited in Claims 4-8, 11 and 14-17.

Official notice is taken that there exists a plurality of well-known and widely used mathematical, statistical and/or computational approaches/methods/techniques for analyzing customer data (e.g. customer satisfaction data) including but not limited to predictive modeling/analysis, data mining, machine learning, supervised machine learning, decision tree, decision rules, recursive modeling, logistic regression in the like wherein the mathematical, statistical and/or computational approaches/methods/techniques are directly substitutable.

It would have been obvious to one skilled in the art at the time of the invention that the system and method for collecting and analyzing motor vehicle buyer satisfaction data as taught by the combination of Lang and Gustafsson et al. would have employed

any of a plurality of well known mathematical, statistical and/or computational approaches/methods/techniques in view of the teachings of official notice.

Further it is noted that while Lang nor Gustafsson et al. teach the specific mathematical, statistical and/or computational approaches/methods/techniques recited, these differences are only found in the non-functional descriptive material and are not functionally involved in the steps recited nor do they alter the recited structural elements. The recited method steps would be performed the same regardless of the specific mathematical, statistical and/or computational approaches/methods/techniques recited. Further, the structural elements remain the same regardless of the specific mathematical, statistical and/or computational approaches/methods/techniques recited. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, *see In re Gulack, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); In re Lowry, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.*

Regarding Claim 10 Lang teaches a system and method for collecting, aggregating and analyzing a motor vehicle buyer data comprising:

- receiving input data including survey, purchase and warranty claim data (Column 3, Lines 35-38; Column 4, Lines 20-30);

- processing the input data (Column 3; Column 4, Lines 19-68; Column 5, Lines 15-44; Figures 1-2); and

- outputting data analysis result(s) based on the processed input data (Column 2, Lines 20-45; Column 4, Lines 47-68).

Lang does not expressly teach outputting a prediction of motor vehicle buyer satisfaction based on the processed input data as claimed.

Gustafsson et al. teach outputting a prediction of motor vehicle buyer satisfaction based on the processed input data (Column 2, Last Bullet, Page 252, Column 2, Page 253; Column 2, Paragraph 2, Page 255; Column 2, Paragraph 1, Page 256; Column 2, Paragraph 3, Page 257; Figures 1-4, Table 1) in an analogous art of collecting and analyzing motor vehicle customer satisfaction data for the purposes of understanding the links/drivers between customer satisfaction, loyalty and business performance (Abstract; Column 1, Paragraph 1, Page 258; Figures 1-2).

It would have been obvious to one skilled in the art above that the system and method for collecting and analyzing motor vehicle customer satisfaction data as taught by Lang would have benefited from outputting a prediction of motor vehicle buyer satisfaction based on the processed input data in view of the teachings of Gustafsson et al.; the resultant system/method enabling businesses to understand the links/drivers between customer satisfaction, loyalty and business performance (Gustafsson et al.: Abstract; Column 1, Paragraph 1, Page 258; Figure 1).

7. Claims 9 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lang, U.S. Patent No. 6,807,518 in view of Gistafsson et al., Measuring and managing the satisfaction-loyalty-performance links at Volvo (2002) as applied to claims 1-8 and 10-17 above, and further in view of Kuntala et al., U.S. Patent Publication No. 20030212691.

Regarding Claims 9 and 18 Lang does not expressly teach identifying and ranking a set of independent variables based on the aggregate buyer satisfaction data as claimed.

Gustafsson et al. teaches the well known identifying the relative importance of customer satisfaction variables as part of the statistical/mathematical analysis of aggregate buyer satisfaction data (Column 2, Paragraph 1, Page 257).

Gustafsson et al. does not expressly teach ranking a set of independent variables as claimed.

Kuntala et al. teach identifying and ranking a set of independent variables based on aggregate data (Paragraph 0007, 0089-0090) in an analogous art of predictive modeling/analysis for the purposes of determining the importance of attributes (variables, parameters) of the predictive models (Abstract; Paragraphs 0004-0005, 0024).

Kuntala et al. further teach the well-known utilization of supervised (machine) learning, regression analysis, artificial intelligence, Bayes network analysis and the like to generate predictive models (Paragraphs 0005, 0024, 0033).

It would have been obvious to one skilled in the art at the time of the invention that the system and method for colleting and analyzing motor vehicle buyer data in order to generate predictive models and satisfaction drivers as taught by the combination of Lang and Gustafsson et al. would have benefited from ranking a set of independent variables in view of the teachings of Kuntala et al.; the resultant system/method enabling users to minimize the amount of data collected and analyzed by identifying the "important attributes" of the predictive model(s) (Paragraphs 004, 0024).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Simodious et al., U.S. Patent No. 5,692,107, teach a system and method for generating predictive models utilizing well known data mining techniques for the well known purpose of forecasting/making predictions about new data based on the aggregated/existing data. Simoudious et al. further teach the utilization of several data analysis approaches/techniques including artificial intelligence, neural networks/models and statistical models to generate the predictive models.

- Busche, U.S. Patent No. 6,493,723, teach a system and method for data mining and analysis of aggregated motor vehicle (transportation) data (warranty, product history, etc.).

- Mundell et al. U.S. Patent No. 6,549,890, a system and method for collecting and analysis buyer (customer, consumer, motor vehicle buyer) data wherein the data is includes customer satisfaction data collected via customer satisfaction/market surveys and the data analysis includes a plurality of data analysis models (templates, mechanisms) such as survey/customer satisfaction analysis (Figure 20). Mundell et al. further teach that one of the key goals of survey/customer satisfaction analysis is to determine key drivers/predictors of customer behavior.

- Mani et al., U.S. Patent No. 6,677,963 teach a system and method for data analysis including the well-known use of "Predictive data mining refers to the use of data mining techniques for building predictive models. Predictive models are learned

from historical (or pre-classified) data using data mining algorithms. These models can then predict the quality or attribute of interest for new and unseen cases. "

Mani et al. further teaches several well known predictive data mining techniques including neural networks, statistical regression, decision trees, decision rules and the like.

- White et al., U.S. Patent No. 6,772,104, teach a system and method for determining and predicting motor vehicle customer satisfaction based on the collection and analysis of motor vehicle buyer satisfaction survey response data (Figure 3).

- Tamayo et al., U.S. Patent No. 6,836,773, teach a system and method for collecting, aggregating and analyzing a plurality of consumer (buyer, customer) data wherein the system/method includes data mining, machine learning as well as the generation of predictive models.

- Busche, U.S. Patent Publication No. 2002/0169652, teaches a system and method for collecting and analyzing a plurality of customer/consumer data (e.g. surveys/questionnaires, warranty data, decision tree) in order to generate and train predictive models for the purposes of predicting customer behavior.

- Ryan et al., Making CSM a power tool (1995), teaches the well-known collecting, aggregation and analysis of customer satisfaction data (e.g. via customer satisfaction surveys) for business decision-making purposes. Ryan et al. further teach predicting several "predictive statistics" (predictive model) of customer satisfaction.

- Steward, Technology Springs Forward to Melt Churn (1996), teaches several commercially available systems and method for generating predictive models of

consumers based on "every single piece of information you might have about your customers" (aggregate buyer data) via data mining/OLAP techniques wherein the predictive models identify customer churn typically caused by customer dissatisfaction.

- Larson, Ford Puts Quality Data in Human Hands (1997), teaches Ford's quality efforts wherein a plurality of motor vehicle buyer data (purchase, warranty, feedback/comments, quality, surveys, etc.) is aggregated and analyzed.

- Dickey, Creating a Customer Satisfaction Measurement System (1998), teaches a system and method for measuring, monitoring, analyzing and reporting customer satisfaction data (surveys, repair/service activity, warranty, etc.). Dickey further teaches the well-known customer satisfaction measurement/monitoring requirements under the QS 9000 industry standard wherein the standard states "Trends in customer satisfaction and key indicators of customer dissatisfaction shall be documented and supported by objective information." Dickey further teaches determining "drivers of satisfaction" as well as assessing the relative importance of the satisfaction drivers.

- Hong et al., Advances in Predictive Model Generation for Data Mining (1999) teaches the old and very well known use of predictive models to make data prediction for unseen/future cases as well as several well known approaches/techniques for predictive modeling generation including machine learning, statistics, data mining, neural networks, decision trees, and the like. Hong et al. further teaches generating lift curves.

- Sharma et al., A Framework for Monitoring Customer Satisfaction (1999), teach a method for collecting and monitoring overall (aggregate) customer satisfaction. Sharma et al. further teach the relationships between customer satisfaction/dissatisfaction and customer loyalty, repeat purchase intentions and switching behaviors as well as the use customer satisfaction trend analysis.

- Abdullah et al., Evaluating functional relationship between image, customer satisfaction and customer loyalty using general maximum entropy (2000) teaches using GME procedures for determining customer satisfaction wherein the GME approach provides better results when there is limited or incomplete data.

- Rao et al., Analysis of Customer Satisfaction Data (2000) teaches a plurality of well known techniques, methods and tools for collecting, analyzing and reporting on customer satisfaction data including but not limited to aggregated motor vehicle customer satisfaction data.

- Weiss et al., Predictive Data Mining (1998), teach a plurality of well known predictive modeling (analysis, analytics) methods and techniques.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott L. Jarrett whose telephone number is (571) 272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hafiz Tariq can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Scott L. Jarrett
Asst. Examiner
April 27, 2007